Evolving the MAGTF for the 21st Century

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UNITED STATES MARINE CORPS
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Foreword

Evolving the MAGTF for the 21st Century provides a framework for refining our primary operational approach for conducting the range of military operations: the Marine air-ground task force.

Long and varied operational experience has proven that the MAGTF—designed to be deployed, employed, and sustained from the sea without reliance on host nation ports, airfields, or permissions—is a fundamentally sound construct. This concept explores ideas for refining the MAGTF in light of likely operating environments, adversaries, tactics, and technologies.

This document does not prescribe specific solutions. Rather, it broadly describes a number of potential refinement options. These options must be critically examined through wargaming, experimentation, and practical application in order to determine their feasibility, operational utility, and desirability. Our purpose in doing so is to ensure that the MAGTF is optimized for the challenges ahead.

G. J. FLYNN
Lieutenant General
U.S. Marine Corps

As we think about this range of threats, it is common to define and divide the so-called "high end" from the "low end," the conventional from the irregular; armored divisions on one side, guerrillas toting AK-47s on the other. In reality, as professor Colin Gray has noted, the categories of warfare are blurring and do not fit into neat, tidy boxes. We can expect to see more tools and tactics of destruction—from the sophisticated to the simple—being employed simultaneously in hybrid and more complex forms of warfare.

Russia's relatively crude—though brutally effective—conventional offensive in Georgia was augmented with a sophisticated cyber attack and a well coordinated propaganda campaign. We saw a different version during the invasion of Iraq, where Saddam Hussein dispatched his swarming, paramilitary Fedayeen along with the T-72s of the Republican Guard.

Conversely, militias, insurgent groups, other non-state actors, and third-world militaries are increasingly acquiring more technology, lethality, and sophistication—as illustrated by the losses and propaganda victory that Hezbollah was able to inflict on Israel two years ago. Hezbollah's restocked arsenal of rockets and missiles now dwarfs the inventory of many nation-states. Furthermore, Russian and Chinese arms sales are putting advanced capabilities—both offensive and defensive—in the hands of more countries and groups.

As defense scholars have noted, these hybrid scenarios combine the "lethality of state conflict with the fanatical and protracted fervor of irregular warfare."

Being able to fight and adapt to a diverse range of conflicts—sometimes all at once—lands squarely in the long history and finest traditions of the American practice of arms. In the Revolutionary War, tight formations drilled by Baron Von Steuben fought Redcoats in the north, while guerrillas led by Francis Marion harassed them in the South. During the 1920s and 30s, the Marine Corps conducted what we would call now stability operations in the Caribbean, wrote the Small Wars Manual, and at the same time developed the amphibious landing techniques that would help liberate Europe and the Pacific in the following decade.

—The Honorable Robert M. Gates
22nd Secretary of Defense
29 September 2008

Introduction

Marines have witnessed the emergence of ***hybrid challenges***—the blurring of conventional war, irregular challenges, terrorism, and criminality—for more than two decades.

In 1991 a detachment from 4th Marine Expeditionary Brigade (4th MEB), embarked aboard USS GUAM and USS TRENTON, was diverted from preparations for Operation DESERT STORM to conduct a noncombatant evacuation of the U.S. Embassy in Mogadishu due to the ongoing civil war in Somalia. Marauding looters, clan militiamen, and former government troops—some of which possessed sophisticated Soviet anti-access weapons left behind by their former Cold War ally—threatened American citizens and members of the international diplomatic community. Two CH-53 helicopters launched at a range of 466 nautical miles and refueled twice in flight in order to deliver a landing force of 51 Marines and 9 SEALs. The landing force secured the embassy compound, recovered personnel from locations throughout the city, and processed 281 civilians from 32 countries for evacuation when GUAM and TRENTON came within CH-46 range. This operation, titled EASTERN EXIT, gave the Navy and Marine Corps a preview of the threat posed by sophisticated weapons in the hands of non-state actors.

In 2001, the 15th and 26th Marine Expeditionary Units (Special Operations Capable) and their respective amphibious ready groups (ARGs) combined to form Task Force 58 (TF 58). TF 58 opened a second front for Operation ENDURING FREEDOM (OEF), projecting a landing force from the sea more than 400 miles inland to seize the desert airstrip south of Kandahar, Afghanistan. This airstrip supported friendly forces for the isolation and seizure of Kandahar, the last political and military stronghold of the Taliban regime. Concurrently, TF 58 conducted sensitive site exploitation in support of counter-proliferation as well as continued strikes and raids against terrorist targets. In subsequent phases of OEF, Marines have been engaged in finding, fixing, and fighting dispersed units of Taliban and Al Qaeda irregulars over extended distances in the rugged and remote interior of Afghanistan.

Evolving the MAGTF for the 21st Century

In 2003, the I Marine Expeditionary Force (MEF) (Reinforced) participated in the opening phase of Operation IRAQI FREEDOM (OIF), attacking from Kuwait into Iraq for 17-days over a distance of 500 miles. In the cities and towns along this advance, they fought regular Iraqi Army units, Fedayeen Saddam paramilitary forces, and foreign jihadists. In subsequent phases of OIF, Marines have been tasked with stabilizing Al Anbar Province, a 53,208 square mile area encompassing more than 1.2 million people living in approximately 40 cities and towns. Marines have had to counter a blend of Sunni insurgents, Al Qaeda terrorists, and local criminal elements in an area which, if it were one of the United States, would rank 26th in geographic size.

In 2006 the 24th Marine Expeditionary Unit, embarked in the IWO JIMA ARG, evacuated American citizens from war torn Lebanon and subsequently delivered humanitarian assistance to the local population. The Navy-Marine Corps team planned and executed these operations in the face of an uncertain threat, in that Hezbollah—a non-state actor—had recently fired an anti-ship cruise missile at an Israeli warship

The events described above revealed some, but by no means all, of the trends associated with hybrid challenges. Non-state actors possessing significant anti-air and anti-ship weapons can be expected to challenge overseas access, even for benign missions. Adversaries will intentionally disperse across wide geographic areas and intermingle with the local citizenry in order to negate conventional military capabilities, such as large ground formations and massed firepower. These adversaries will selectively use the local population as a mask for, adjunct to, or the object of their operations. This dispersion and intermingling will produce a non-linear battlespace designed to over-extend friendly forces and create vulnerable lines of communication. Adversaries will seek to exploit this vulnerability using cheap, off-the-shelf weapons. They will continually evolve improvised devices that use modern information technology to detonate simple explosives. Furthermore, information technology will continue to provide the means for such adversaries to transmit information—and disinformation—on a local, regional, and global scale in order to manipulate public perception of events.

Small Wars Legacy

To appreciate these trends, it is appropriate for Marines to review our "small wars" legacy and consider if, and how, those lessons apply today.

As early as 1899 in the Philippines, Marines were involved in their first of many counterinsurgency expeditions. Experience taught them that isolating the insurgents from the population was the key to successful counterinsurgency. Doing so required a cohesive blend of political, economic, public health, and military actions designed to gain the trust of the local populace and erode support for the insurgents.

In the 1920s and '30s, the Marine Corps honed its small wars expertise in Nicaragua, Haiti and the Dominican Republic. Experience and innovation refined the tactics and techniques of counterinsurgency. Units were widely dispersed to protect remote villages and to provide patrol bases from which Marines could penetrate surrounding jungles and deny insurgent sanctuary. Marine aviators provided reconnaissance, close air support and re-supply for ground forces. Commanders initiated infrastructure improvements, such as road building and well drilling, to promote economic development and public health. They established constabularies to expand security and support governance. The Marine Corps codified these lessons in a treatise still considered authoritative, the *Small Wars Manual* of 1940.

Key Distinctions Between Yesterday and Today

It is important to recognize that while the *Small Wars Manual* remains a highly informative and useful resource today, the adversaries it addressed were fighting principally to change or take control of political institutions within a single state. In contrast, the groups generically referred to today as "insurgents" may actually serve a number of different causes. First, there are still "nationalists" who oppose their own government or an occupying power. Second, there are criminals who undermine government power not in pursuit of a political agenda, but to enable illicit activities such as drug trafficking. Finally, there are extremist groups who are pursuing trans-national religious or ideological agendas. These three categories are not mutually exclusive. Various groups may exhibit similar characteristics, as when nationalists use criminal activity

to raise operating funds. Some groups may choose to cooperate with others when their objectives coincide. Conversely, different groups may employ similar tactics and techniques to achieve widely dissimilar objectives.

Given the foregoing, understanding the nature of a given conflict, which has always been important, has become a much more complex imperative today. Intertwined with understanding the nature of hybrid conflict is the imperative of understanding the society it resides within, either as the embodiment of that society's aspirations or as a parasite that preys upon it. In keeping with the *Small Wars Manual*, effective military interaction with the local populace remains critically important. Historically, it has involved shaping perceptions over an extended period.

A significant change, however, is the way in which military interaction with the populace has been complicated by the speed of information today. Because of the ability to pass information around the world near-instantaneously, minor tactical actions in remote locations can become major strategic events. Our adversaries have been very effective at employing dispersed, cellular organizations to exploit this reality and promote their strategic message. Friendly forces, including small, dispersed units, are under enormous scrutiny. Their actions must not only be consistently reasonable, legitimate, and successful—they must be quickly perceived to be so. Friendly forces are in a daily struggle to shape popular perceptions, extend influence, and establish their legitimacy.

Another significant change is the level at which forces are task-organized. The *Small Wars Manual* notes that:

> *A force assigned a small wars mission should be tactically and administratively a self sustaining unit. It must be highly mobile, tactical units, such as the battalion, must be prepared to act independently as administrative organizations. The final composition of the force will depend upon its mission, the forces available, and character of the operations…The force must be of sufficient strength and so proportioned that it can accomplish its mission in the minimum time and with minimum losses.*

The wisdom contained in that passage remains very relevant today. Recent operations have placed a premium on units with a high degree of mobility and self-sufficiency. Furthermore, there is an increasing demand for the ability to employ company-sized task forces in more autonomous roles. Recent operations also demonstrate that rifle companies need increased resources and support to operate in this manner. These observations do not infer that platoons, squads, or fire teams do not perform independent missions. The distinction between them is that companies must be able to conduct *sustained* operations across the range of military operations.

The recently published concept for *Enhanced Company Operations* espoused increased access to, and organic control of, intelligence, logistics, and fires capabilities at the company level. Additionally, *Enhanced Company Operations* identified the need for increased excellence at the individual, squad, and platoon levels. This theme is consistent with the basic premise of the "strategic corporal," which is that future operations will be more complex in character and require an increased level of junior leadership and tactical acumen.

Description of the Military Problem

The MAGTF remains a fundamentally sound construct for task-organizing and employing Marine Corps forces across the range of military operations. However, given the nature of the hybrid challenge, recent operational experience, and the historical insights provided by the *Small Wars Manual*, current tables of organization and equipment, as well as select tactics, techniques, and procedures, must be refined in order to ensure that MAGTFs possess sufficient ability to:

- Overcome challenges to access and mobility;
- Employ, support, and sustain subordinate maneuver units at extended distances, or in compartmentalized terrain which creates physical separation, from higher and adjacent units;
- Interact effectively with local populations to understand a given situation and ensure tactical actions support strategic goals;

- Perform multiple, diverse, and often simultaneous tasks across the range of military operations.

The Central Idea

The Marine Corps will explore revisions to MAGTF tables of organization and equipment, as well as select tactics, techniques, and procedures, in order to meet the challenges of the 21st century.

This exploration will begin at the rifle company level, which will provide a baseline for a more comprehensive evolution. ***Enhancing the ability of rifle companies to conduct sustained operations—for missions across the range of military operations—will drive changes throughout the MAGTF.***

Envisioned enhancements include the provision of fires, mobility, logistics, communications, intelligence, information operations, foreign internal defense, and civil-military operations capabilities down to lower echelons of command. In considering these enhancements, it must be determined what capabilities:

- Should be organic;
- Should be task-organized for the duration of a pre-deployment/deployment cycle or campaign;
- Should be attached or in direct or general support for a particular operation or phase of a campaign;
- Are within a given echelon's ability to command and control.

Developing a Baseline for Innovation

Providing enhanced capabilities to lower echelons of command will have implications throughout the MAGTF. Enhancing the capabilities resident within rifle companies will offer operational advantages, but will also impose training, logistics, and command and control requirements that will affect all levels of the MAGTF and each company commander's

span of control. Furthermore, increasing a unit's self-sufficiency may, if imprudently accomplished, unintentionally decrease its mobility. Innovation and experimentation must therefore focus on establishing an appropriate balance. It must be determined what capability and capacity must be resident within rifle companies to gain insights into how to evolve the MAGTF:

- **Provide and Coordinate Indirect Fires.** Is the present mortar section sufficient, or do rifle companies require larger, longer-range mortars, rockets, artillery, or unmanned aerial vehicles? Should forward air controllers, mortar and/or artillery forward observers, and shore fire control parties be assigned? Is it preferable to establish "universal controllers" capable of employing all supporting arms or to cross-train designated billet holders in each company for that purpose? Should the communications equipment and expertise to employ supporting arms be resident at the platoon, squad, and fire team levels? What capability for fire support coordination must be resident within rifle companies? Can certain fire support tasks be automated, while others must remain subject to direct human decision-making? What capabilities need to remain at the battalion level?

- **Improve Ground Mobility.** Does every company need some form of inherent amphibious and/or ground mobility? In amphibious operations, constraints on amphibious lift will likely result in some companies being foot-mobile after landing. Is it feasible and desirable to establish vehicle augmentation packages for delivery via maritime prepositioning ships or joint high speed vessels, so that these companies can be subsequently mounted? What type of combat engineer support is required at the company level?

- **Increase Logistical Self-sufficiency.** Is it feasible to use unmanned air and/or ground vehicles for re-supply? What number of helicopter support teams and associated equipment is required to conduct aerial re-supply? Is greater use of air-delivery preferable? Can resupply requirements be reduced by using alternative fuels or adding water purification capability? What level of vehicle, weapons, and equipment maintenance can be performed at the company level? Do hospital corpsmen require increased skills regarding prevention,

diagnosis and treatment of illnesses, injuries, and wounds? Do companies need construction engineering capabilities? What about power sources for communication and intelligence systems or maintenance equipment?

- **Shape perceptions, extend influence, and establish legitimacy.** The Marine Corps has a number of individual professional development and unit training initiatives underway to promote cultural awareness and effective interaction with local populations and forces. In addition to those initiatives, are there special capabilities that should be resident at the company level? Do civil-affairs personnel or linguists need to be added? How about security cooperation and foreign internal defense specialists? What about capabilities to counter the enemy's attempts to manipulate information or spread disinformation, such as electronic warfare, computer network operations, or strategic communications? At what level are information operations coordinated? What are the roles and responsibilities of small unit leaders in information operations?

- **Understand the Environment and Situation.** What capabilities should rifle companies have to collect information and process it into intelligence? Do they need specifically trained scouts, ground or radio reconnaissance Marines, or analysts? Should companies have their own unmanned aerial vehicles or remote sensors? Is it desirable to provide foreign area experts, representatives from other government agencies, or liaisons from host nation forces? What higher echelon intelligence products or systems should rifle companies contribute directly to and benefit from? What systems should they have access to? What demands will adding these systems place on electric power and bandwidth?

- **Design and Direct Operations.** What will the company commanders' command and control support requirements be? Do they require an operations and/or fire support coordination cell? Given the extended distances or compartmentalized terrain that will likely characterize each company's area of operations, what is the right mix of on the move, beyond line-of-sight, over-the-horizon communications equipment? Is it feasible and desirable for rifle companies to maintain a common operating picture? Should they be

directly linked to a joint fires and intelligence network? How will they interact with other government agencies or non-governmental organizations? Given the increased complexity of company-level operations, should company commander billets be filled by majors and executive officer billets by captains to provide leadership that is more experienced?

Evolving the MAGTF as a Whole

However the questions above—and the additional questions they generate—are answered, there will be a ripple effect throughout the MAGTF. Fundamentally, it must be determined if the various capability enhancements at the company level will be additive to, or a re-distribution of, those capabilities resident in higher echelons of the ground combat element or the other elements of the MAGTF. In addition to affecting tables of organization and equipment, these determinations may also result in changes to MAGTF tactics, techniques, and procedures. Each element of the MAGTF may be impacted differently.

- **Ground Combat Element**. How will changes in the organization and employment of rifle companies affect the organization and tasks performed by battalion and regimental aid stations, supply and motor transport sections, and communications platoons? How will the medical and equipment evacuation chains evolve? What level of maintenance should each echelon be capable of? Will it still be appropriate to maintain a weapons company at the battalion level? If so, will the capabilities within the weapons company need to change? Within the Marine divisions, the battalions and batteries of the artillery regiments have historically maintained habitual relationships with the infantry regiments and battalions; should artillery organization be revised to establish habitual relationships with rifle companies? Given the extended battlespace, will there be a need for greater dispersal and/or range for artillery? Will the separate battalions within the Marine Divisions—assault amphibian vehicles, tanks, combat engineers, reconnaissance, and light armored reconnaissance—require different capabilities to extend their operational reach?

- **Aviation Combat Element.** How will the dispersal of companies across an extended battlespace impact demand for assault support, close-in fire support, and close air support? What will be the demand for aerial reconnaissance and communications relay? Will there be a requirement for increased capacity regarding forward arming and refueling points and/or expeditionary airfields? What will be the appropriate distribution of unmanned aerial vehicles among the elements of the MAGTF? What will be the impact on airspace control if they are distributed down to the rifle company or additional unmanned aircraft are procured for logistics purposes? Will the requirement to provide qualified aviators as air officers and forward air controllers increase?

- **Combat Logistics Element.** What is the right balance between centralized and decentralized logistics support? Should supply and maintenance chains be streamlined? Will there be a need for task-organized logistics teams in direct support of dispersed companies? Will motor transport, military police, and construction engineer capabilities be re-distributed? Will health services units and the medical evacuation chain evolve? If unmanned air and ground vehicles are procured for logistics purposes, how will they be organized and at what echelons? Will there be a requirement for more air delivery capability and capacity?

- **Command Element.** What maneuver control and fires support coordination measures will be appropriate in an extended, non-linear, and perhaps non-contiguous battlespace? With a potentially exponential increase in the number of contributors and consumers of intelligence and fire support, what will be the impact on staff organization and procedures? What level of common operating picture should be available at each echelon? Will the units within the Marine expeditionary force headquarters group—communications, radio, and intelligence battalions and air and naval gunfire liaison companies—require more or different capabilities? Should some of these capabilities be distributed at lower echelons? Will battalions require additional capabilities?

Key Planning Factors

Exploration of potential MAGTF enhancements must be guided by established planning factors that will provide a common departure point and promote unity of effort. First and foremost among those planning factors is the role of the Marine Corps as a naval, expeditionary force in readiness. Although the Marine Corps can project forces solely through organic, strategic, or theater air assets, given our naval character the MAGTF is primarily designed to be deployed, employed, and sustained from the sea without reliance on host nation ports, airfields, or permissions. Amphibious ships and expertise provide this capability.

The Navy and Marine Corps have established key amphibious lift planning factors. Included among them is that embarking the assault echelon of a MEB requires seventeen ships, at least five of which must be amphibious assault ships (LHA/LHD). Embarking the capabilities of a MEU normally requires three ships, an LHA/LHD, an amphibious transport, dock (LPD), and a landing ships, dock (LSD).

Any revisions to the MAGTF must therefore be made with due consideration for how they will affect embarkation aboard available amphibious lift. For more than a decade the Marine Corps has fielded vehicles and equipment largely unchecked by embarkation considerations, which has exacerbated existing amphibious lift shortfalls. This issue has become so extreme that in recent years the five established embarkation planning factors—troop berthing, vehicle space (in square feet), cargo space (in cubic feet), aircraft deck spots, and landing craft, air-cushioned spots—have been trumped by a previously unforeseen sixth factor: weight. The acquisition of an increased number of vehicles of all types, to include mine resistant vehicles, as well as larger assault support aircraft, has increased the weight problem exponentially. Similarly, due consideration must be given to the inter-relationship between MAGTF enhancements and the lift capabilities resident in maritime prepositioning ships, both current and future.

While the planning factors associated with amphibious and maritime prepositioning ships are well established, others remain to be determined. If sustained, independent operations by rifle companies are to provide the basis for enhancements throughout the MAGTF, key performance

parameters must be established in order to allow experimentation to proceed. These include determining:

- How far and fast do company landing teams need to be projected from the sea?
- What geographic environments—urban, desert, mountain, or jungle—should companies be organically optimized for?
- How big should their operating radii be once ashore?
- How long will they operate independently?
- How quickly will companies need to re-aggregate for emerging missions that require massed forces?
- What conditions must the MAGTF set to enable operations by independent company landing teams?
- What reaction force capability and response time must the MAGTF be able to provide?

Determining parameters like these must start with an assessment of current capabilities, followed by the establishment of new benchmarks. These benchmarks may be no more than initial estimates. They will likely evolve over time as operational experience informs requirements and experimentation reveals the art of the possible. Whether fixed or evolutionary, formally established planning factors will be essential to ensure a cohesive and integrated approach to MAGTF enhancements.

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Summary

The MAGTF remains a fundamentally sound construct for task-organizing and employing Marine Corps forces across the range of military operations. Using enhancements to rifle companies as the basis for innovation, the Marine Corps will conduct a comprehensive and integrated exploration of potential enhancements to the MAGTF as a

whole. This document has posed a number of questions to guide that exploration.

Wargaming, experimentation, and practical application are required to critically examine these ideas and determine their feasibility, operational utility, and desirability. This exploration will provide the venue for refining tables of organization and equipment, as well as selected tactics, techniques, and procedures, which will optimize the MAGTF for overcoming the hybrid challenges of the 21st century.